


Date: Wednesday, 17/06/2009 8:50:24 AM
 User: Linda Lacelle

Process Sheet

Customer : CU-DAR001 Dart Helicopters Services	Drawing Name : DRLLING DETAIL, 205 SKIDTUBE
Job Number : 48616	
Estimate Number : 11808	
P.O. Number :	Part Number : D25801
This Issue : 17/06/2009 S.O. No. :	Drawing Number : D2580 REV D
Prsht Rev. : NC	Project Number : N/A
First Issue : / / Type : SKIDTUBES	Drawing Revision : D
Previous Run : 48455	Material :
Written By : 	Due Date : 24/06/2009 Qty: 4 Um: Each
Checked & Approved By :	
Comment : Est B 01.11.08 Revised Step 9, 10, 12, and 13 SM Est C 09.05.26 re-format EC verified by: DD	

Additional Product

Job Number:



Seq. #:	Machine Or Operation:	Description :
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1.0	D25001190	Ext'n -1' Beam Tube 4"
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Comment: Qty.: 1.0000 Each(s)/Unit Total : 4.0000 Each(s)

Pick:

Qty	Part Number	Description	Batch
1	1 D2500-1-190	Extrusion	BT 46468

MB 09-06-17 (4)

2.0	HAND FINISHING1	HAND FINISHING RESOURCE #1
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Comment: HAND FINISHING RESOURCE #1

1- Inspect mat'l D2500-1-190 for damage.

2- Chemical Conversion Coat as per QSI 005 4.1

MB 09-06-17 (4)

3.0	D2596	Web, 205 Skidtube
-----	-------	-------------------



Comment: Qty.: 1.0000 Each(s)/Unit Total : 4.0000 Each(s)

205 Web

Pick:

Qty	Part Number	Description	Batch
1	D2596	1 beam	348617

ZE 09-06-17 (4)

4.0	SKIDTUBES 1	SKIDTUBESS RESOURCE 1
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Comment: LANDING GEAR RESOURCE 1

1-Drill pilot holes using drill jig DT 8149 (Do not use cutting fluid)

2-Open holes to 0.500" as per Dwg D2580 without cutting fluid

MP 09-06-18 (4)

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Date: Wednesday, 17/06/2009 8:50:24 AM
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Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: DRLLING DETAIL, 205 SKIDTUBE

Job Number: 48616

Part Number: D25801

Job Number:



Seq. #:

Machine Or Operation:

Description :

3-Deburr and blow out all chips from inside of tube

4-Bond web in place per QSI 015.

Pick:

Qty Part Number Description Batch
A/R Sikaflex-291 *M111557*
Sikaflex expire date: *10-01-31*

BE 09/06/18

5.0

QC3

INSPECT POWDER COAT/CHEMICAL CONVERSION



Comment: INSPECT POWDER COAT/CHEMICAL CONVERSION

09/06/18

6.0

QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

09/06/18

7.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Identify and Stock

Location: *Skid tube all*

mb 09-06-18 (4)

8.0

QC21

FINAL INSPECTION/W/O RELEASE



Comment: FINAL INSPECTION/W/O RELEASE

09/06/19

Job Completion



MF 09-06-19

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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NOTE: Date & initial all entries



DESIGN <i>[Signature]</i>	DRAWN BY <i>[Signature]</i>	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED <i>[Signature]</i>	APPROVED <i>[Signature]</i>	DRAWING NO. D2580	REV. D SHEET 1 OF 3
DATE 07.02.27		TITLE 205 SKIDTUBE ASSEMBLY	SCALE NTS
A	96.09.16	NEW ISSUE	
B	96.12.02	AS MANUFACTURED	
C	98.08.26	REDRAWN, INCLUDED DEO 9094/9097	
D	07.02.27	CHANGE TO SS WEARPLATES AND GASKETS, INCLUDE DEO 9124/9183	

RELEASED
07-06-28 *[Signature]*

QTY -041	QTY -045	Part Number	Description
X		D2580-041	SKIDTUBE ASSEMBLY
	X	D2580-045	SKIDTUBE ASSEMBLY
1	1	D2500-1-190	EXTRUSION
1	1	D2576-3	STEP
20	24	D2579	CROSS BOLT SPACER
16	16	D2594-1	PLUG
16	16	D2594-3	O-RING
1	1	D2596	205 WEB
1	1	D2855	AFT CAP
1	1	D3564-5	WEARSHOE
1	1	D3564-9	WEARSHOE
1	1	D3564-11	WEARSHOE
1	1	D3564-13	WEARSHOE
2	2	D3566-1	GASKET
1	1	D3566-5	GASKET
1	1	D3566-13	GASKET
50	50	ALS7-1032-130 or AKS7-1032-130 or AKS4-1032-130 or AELS-1032-130	INSERT
50	50	AN3C4A	BOLT
2	2	AN3-5A	BOLT
50	50	AN960C10L	WASHER
2	2	AN960JD10L	WASHER

*wld
48616*

GENERAL NOTES:

- 1) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 2) ALL DIMENSIONS ARE IN INCHES
- 3) INSERT D2596 WEB TO LOCATION SHOWN OFF AFT END OF SKIDTUBE AND BOND WEB INTO OUTER TUBE WITH NON-STRUCTURAL SIKAFLEX-241 ADHESIVE PER DART QSI 015 BEFORE BENDING. ENSURE HOLES LINE-UP.
- 4) BEND AS A SMOOTH RADIUS STARTING WITH A MAXIMUM CENTERLINE RADIUS OF 60 AND ENDING WITH A MINIMUM RADIUS OF 30. A MAXIMUM REDUCTION OF 0.200 IN DIAMETER IS ALLOWABLE IN THE BENT PORTION OF THE TUBE.
- 5) USE DART DRILL TEMPLATE TD2577-205 TO LOCATE AND DRILL Ø0.297 HOLES FOR WEARSHOE INSERTS. INSTALL ALS7-1032-130 PER SECTION D-D (50 PLACES) AFTER FINISH. INSTALL AN3C4A BOLTS AND AN960C10L WASHERS WITH SIKAFLEX-241/-291.
- 6) WELDING TO BE DONE PER DART QSI 004.
- 7) FINISH:
SEE NOTES ON
PAGE 2 FOR D2580-041 AND
PAGE 3 FOR D2580-045
- 8) INSERT D2594-1 PLUG C/W D2594-3 O-RING IN HOLES MARKED 'P' (BOTH SIDES OF TUBE) AFTER FINISH (16 PLACES).

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W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

RELEASED
07-06-28

Diagram illustrating the grinding locations for the propeller cross-section. The diagram shows a cross-section of a propeller with the following labeled features:

- GRIND FLUSH (4 PLACES)
- GRIND FLUSH
- D2576-3 STEP
- GRIND FLUSH
- LOCATION RIDGE ON UNDERSIDE OF D2576

Technical drawing of a circular base plate with a central hole and a rectangular slot. The drawing includes the following labels and dimensions:

- DRILL PRIOR TO D2855 CAP INSTALLATION (2 PLACES)**: Points to two small circles on the top edge of the plate.
- SEAL WITH SIKAFLEX-241/-291**: Points to the gap between the plate and the base.
- AN3-SA BOLT (1)**: Points to a bolt passing through the central hole.
- AN960JDTOL WASHER (1)**: Points to a washer on the bolt.
- (2 PLACES)**: Points to the two locations where the bolt and washer are used.
- D2855 CAP**: Points to the cap on the bolt.
- 0.208**: Dimension for the diameter of the central hole.
- 0.40**: Dimension for the width of the rectangular slot.

Diagram illustrating the assembly of the D2579 Spacer. The assembly consists of a central web (D2596 WEB (REF)) and a spacer (D2579 SPACER). The spacer is inserted into the web, and the assembly is welded into place and ground flush. The diagram shows the location of the holes for the spacer and the web.

Labels in the diagram:

- D2579 SPACER
- D2596 WEB (REF)
- ALS7-1032-130 (REF) (TYP 50 PLACES)

Instructions for assembly:

AFTER DRILLING AND BENDING ASSEMBLY PERFORM THE FOLLOWING FOR: #0.508 HOLES ONLY:

1. CHAMFER HOLE 0.050 X 45°
2. INSERT D2579 SPACER (20 PLACES)
3. WELD INTO PLACE AND GRIND FLUSH
4. C'BORE D2579 SPACER TO #0.437 X 1.00 DEEP

i) FINISH: ACID ETCH, ALODINE PER DART QSI 005 4.1 PRIOR TO INSERTING D2596 WEB POWDER COAT ASSEMBLY GLOSS WHITE (REF. 4.3.5.1) PER DART QSI 005 4.3 BLACK ANTI-SKID PAINT AS INDICATED PER DART QSI 005 4.4

37.50
DISTANCE TO AFT END
OF D2596 WEB

3
7

1.750 1.750

#0.508 (TYP.)
(40 PLACES)

REFER TO DETAIL A

8.750

17.375

26.000

34.188

57.313 (REF)
7 EQUAL SPACES
8.188 PITCH

38.0

91.500

190.0
(D2500-1)

D3560-041 ASSEMBLY DETAIL

WELD AS PER DETAIL B

BLACK ANTI-SKID TO 0.5 ABOVE LOCATION RIDGE

BLACK ANTI-SKID TOP OF STEP TO 0.5 ABOVE BOTTOM EDGE

0.5

1.5

1.5

0.6

REFER TO DETAIL C

P P P P P P P

D3566-1

D3566-5

D3566-13

D3564-11

D3564-5

D3564-9

D3564-13

AN3C4A BOLT (1)

AN960C10L WASHER (1)

(50 PLACES)

DESIGN

DRAWN BY

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MARKESBORO, ONTARIO, CANADA

DRAWING NO.	REV. D
D2580	SHEET 2 OF 3
TITLE	SCALE
205 SKIDTUBE ASSEMBLY	1:24

RELEASED
07 Dec 28

Diagram illustrating the grinding locations for the propeller cross-section. The diagram shows a cross-section of a propeller with the following labels and features:

- GRIND FLUSH (4 PLACES)**: Indicated by four small circles on the outer edge of the propeller.
- GRIND FLUSH**: Indicated by a small circle on the inner edge of the propeller.
- D2576-3 STEP**: Indicated by a line on the outer edge of the propeller.
- LOCATION RIDGE ON UNDERSIDE OF D2576**: Indicated by a line on the inner edge of the propeller.
- 1/8**: A dimension line indicating the thickness of the propeller at the bottom.

Diagram illustrating the rear view of the antenna assembly. The diagram shows the mounting bracket, the antenna element, and the sealant application. The following components and dimensions are labeled:

- DRILL PRIOR TO D2855 CAP INSTALLATION (2 PLACES)
- SEAL WITH SIKAFLEX-241/-291
- AN3-SA BOLT (1)
- AN960JD10L WASHER (1)
- (2 PLACES)
- D2855 CAP
- SEE NOTE ii)
- 0.40

Diagram of a circular component with labels:

- D2579 SPACER
- D2596 WEB (REF)
- AL57-1032-130 (REF)
(TYP 50 PLACES)

PERFORM THE FOLLOWING FOR #0.508 HOLES ONLY:

1. CHAMFER HOLE 0.050 X 45°
2. INSERT D2579 SPACER (20 PLACES)
3. WELD INTO PLACE AND GRIND FLUSH
4. C/BORE D2579 SPACER TO #0.437 X 1.00 DEEP

i) FINISH: ACID ETCH, ALODINE PER DART QSI 005 4.1 PRIOR TO INSERTING D2596 WEB POWDER COAT ENTIRE ASSEMBLY GREEN (REF. 4.3.5.8) PER DART QSI 005 4.3 BLACK ANTI-SKID PAINT AS INDICATED PER DART QSI 005 4.4

ii) IT IS ACCEPTABLE TO GRIND A RELIEF IN THE D2855 AFT CAP TO PREVENT INTERFERENCE WITH THE SPACER AT THIS LOCATION

37.50

DISTANCE TO AFT END OF D2596 WEB

38.0

8.750

17.375

26.000

34.188

91.500

190.0 (D2500-1)

REFER TO DETAIL A

REFER TO DETAIL E

#0.508 (TYP.) (40 PLACES)

57.313 (REF) 7 EQUAL SPACES 8.188 PITCH

1.750

1.750

(MAKE FROM D2580-1 DRILLING DETAIL)


5.985
1.4
5.338 (REF)
51.340
39.580
5.915
3.630 (REF)
Ø0.508 (8 PLACES)
20.0
Ø0.640
11
1.0
1.0
32.0 ± 1.0
13.4
4
4

DISTANCE BETWEEN HOLE AND TANGENT POINT

DISTANCE BETWEEN HOLE AND TANGENT POINT

[illegible]

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DRAWING NO.	REV. D
D2580	SHEET 3 OF 3
TITLE	SCALE
205 SKIDTUBE ASSEMBLY	1:24